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A FOLLOW-UP STUDY OF THE EFFECTIVENESS OF E-LEARNING AND BLENDED LEARNING DURING THE CORONA PANDEMIC

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Abstract:

In late 2019, the Wuhan City Health Commission reported mass cases of a mysterious pneumonia in Wuhan, China, which the World Health Organization (WHO) later named the novel coronavirus disease (COVID-19). Within two years, 150 million people were infected and 3 million died (World meter, 2021). WHO has announced safety measures to prevent the spread of the virus, such as frequent hand washing, avoiding touching the eyes, nose and mouth, and maintaining a social distance of 1 meter. Social distance affected both the economic system and societies. The epidemic shut down many economies, shutting down businesses, which ultimately led to mass layoffs and poverty. There was also a major disruption in the education system, as schools, colleges and universities were temporarily closed due to social distancing. Schools were closed in almost 200 countries.
Over the last few years, we have seen a huge increase in the use of various technologies to support the learning and training of organizations. For many organizations, online learning is the default choice. The terms e-learning and blended learning are often used interchangeably, which is not a problem in casual conversation. The main difference between e-learning and blended learning is that e-learning takes place entirely over the Internet, while blended learning uses both face-to-face classroom sessions and online learning methods. The main difference between e-learning and blended learning is that e-learning is a learning method that uses only online platforms, while blended learning offers a combination of online methods and traditional face-to-face classroom learning methods. Although teacher instruction is provided in a blended learning environment, teacher instruction is

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often not provided in an online learning environment. In addition, students must follow self-study and independent learning methods in online learning. In addition, e-learning environments offer students the freedom to choose their own learning pace.

This study aims to follow up how online learning effectiveness during this special time. The researchers developed a semi-closed questionnaire based on a 1-0 point scale from 1=yes to 0=no. The items in the questionnaire were based on the attitudes of students, parents and educators about blended learning. The questionnaire contains 5 parts: bio, technological aspect, educational aspect, platforms and applications, Training aspect and Suggestion. The section includes information about whether the respondent is a parent, student or educator. The technology department simulates several technical and technological aspects and the suitability of technical equipment in your home. The training section contains some points about the teaching-learning during e-learning. In the Apps and Platforms section, we consider which platform or program is best for e-learning or blended learning in Iraq. In the education section, many people wonder about the competence of the teacher and the student, and do they need more education.

The impact of online learning on education creates new challenges for teachers, parents and students who take online courses that must be quickly overcome. The process of teaching and learning in an online learning environment is different from a traditional classroom and can be more challenging for both teachers and students. For the teacher and the student to succeed in this new learning, it is important to recognize the challenges and consider the best practices of online learning. To understand the difficulties associated with online learning, it is important to define what is meant by the term "e-learning". Clark and Mayer (2011) define e-learning as learning delivered through any technology designed to promote learning. Unlike a traditional classroom, teaching and learning are done differently in an e-learning environment, which can create new difficulties for both teachers and students using this e-learning platform. Through technological learning tools, the traditional classroom learning environment has been replaced by online or blended learning, which is drastically changing the face of education. To ensure student success, it is important to consider the difficulties that teachers and students face in an online learning environment.

Key words: E-Learning, The Corona Pandemic, Blended Learning.

1.1 Introduction

In late 2019, the Wuhan City Health Commission reported mass cases of a mysterious pneumonia in Wuhan, China, which the World Health Organization (WHO) later named the novel coronavirus disease (COVID-19). Within two years, 150 million people were infected and 3 million died (World meter, 2021). WHO has announced safety measures to prevent the spread of the virus, such as frequent hand washing, avoiding touching the eyes, nose and mouth, and maintaining a social distance of 1 meter. Social distance affected both the economic system and societies. The epidemic shut down many economies, shutting down businesses, which ultimately led to mass layoffs and poverty. There was also a major disruption in the education system, as schools, colleges and universities were temporarily closed due to social distancing. Schools were closed in almost 200 countries.

Educational institutions are the center of social interaction and learning; Therefore, it was an effective measure to prevent the spread of the COVID 19 virus. The closure of educational institutions has changed the learning methods of more than half a billion students worldwide (Collopy, & Arnold, 2009: 100). During the crisis, students, teachers and staff moved from home to work. Students became virtual learners and parents assumed the role of pseudo-teacher. Distance learning has become the new normal, and universities are willing to teach both online and face-to-face as needed. Interactive online classes and various communication applications were used to ensure communication and learning between teachers and students.

During the coronavirus pandemic, universities tested and adopted such hybrid models to keep students, faculty and staff learning and safe. These blended or hybrid learning methods combine learning and web-based technologies, and the impact of such practices on student learning needs to be investigated. As one of the most important stakeholders in the learning process, the experiences of distance students should be studied from the point of view of future political decision-making.

1.2 the problem and significance of the study

The academic year 2020–2021 was one of the foremost challenging time for workforce, understudies, and scholarly directors. In spite of tall inoculation rates, a few shape of in-person graduations and the capacity to return to a few face-to-face learning, one cannot deny the challenges postured by the raging pandemic (Dorn et al., 2020).

Earlier to the pandemic, the larger part of the classes in conventional brick and mortar schools were advertised in a completely face-to-face organize. There are numerous benefits of face-to-face organize; this teaching methodology gives in-person, genuine time interaction between faculty-students and student-student, which in turn can start imaginative questions and discussions. Students have an opportunity to look for clarification or reaction to their questions in their classroom (Paul & Jefferson, 2019). students who esteem face-to-face instruction, in-person lesson dialogs, and natural holding between workforce and students may not appreciate online learning (Roval & Jordan, 2004). It'll be difficult for them to avoid face-to-face learning exercises and sit in front of computers to complete the work. There's an expanding body of prove that recommends that in-person learning gives inspiration, makes a difference in building a sense of community, and gives much required support to students. This too permits educates to choose up on nonverbal cues and make suitable changes within the substance and instructing technique. (Singh et al. 2021:124)

Singh et al (2021) write several benefits of on-campus classes, one cannot disregard how rapidly universities, K-12 school, and other educate of higher instruction transitioned to online learning in arrange to proceed instruction amid COVID-19 emergency. Adaptability, capacity to work at your possess time and pace, locks in learning involvement,

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self-directed learning, taken a toll viability, and capacity to create in-depth discourses are a few of the foremost broadly cited benefits of online learning. (Strayer, 2012).

It is secure to expect that the COVID-19 pandemic has changed the confront of higher education. Both conventional and online medium of instruction have their advantages and disadvantages. Many universities and scholastic teach have received hybrid or blended medium of instruction. This shape of instruction includes both in-person gatherings on campus and adaptable plan online learning. Hybrid and blended instruction permit students to encounter both face-to-face and online learning, as well as planned and self-paced classwork. In each field, change comes with questions. There's a clear require for conducting ponders to illustrate effectiveness of blended and hybrid instruction and how teaches can work on planning their classes making it a practical alternative amid current times and as we prepare to educate within the post-vaccine and post-pandemic world. (Rodriguez,2020: 24)

The term **blended learning** is generally applied to the practice of using both online and **in-person** learning experiences when teaching students. In a blended-learning course, for example, students might attend a class taught by a teacher in a traditional classroom setting, while also independently completing online components of the course outside of the classroom. In this case, in-class time may be either replaced or supplemented by online learning experiences, and students would learn about the same topics online as they do in class.

1.3 The aim

With the rampant pandemic of COVID-19, an increasing number of people are acquiring knowledge through online learning approaches. This study aims to follow up how online learning effectiveness during this special time.

1.4 Literature Review

The evolving nature of technology has provided opportunities for the education sector, especially during COVID-19, where they can be combined with traditional teaching. Technology provides the infrastructure, tools and resources to prepare and deliver blended courses. Blended learning has helped to continue teaching and learning during the pandemic, when teachers are working from home and students are learning at home. The pandemic has changed the way government and businesses operate, and universities have also discovered that technology must be adapted for education and learning, because the growth and development of future generations cannot be stopped. Technology has promoted blended learning environments where knowledge and information are readily available through interactive technologies. Universities have explored effective learning environments using different technologies, such as e-books, simulations, podcasts, blogs, vlogs. Covid-19 has forced universities to shift from face-to-face teaching to online and blended learning models as technology supports the delivery and preparation of online courses (Schaber et al., 2010).

1.5 History of online and Blended Learning

Technology has changed the face of higher education. In the beginning, traditional face-to-face learning was the only form of teaching where both teacher and students met physically in a traditional school (Jones, 2019; Nortvig et al., 2018). In the 1990s, online learning also began to spread, when students could complete coursework asynchronously, without coming to campus and physically being in a classroom (Nortvig et al., 2018: 40; Jones, 2019).

It is also important to note that academic administrators have found that online learning can replace in-person learning because it is a cost-effective option for students. Consequently, in the mid-1990s, there was a desire to increase the offer of online courses (Schaber et al., 2010). Despite increased efforts to launch more courses, online learning has not been as effective as anticipated because learning has been primarily a passive activity (Schaber et al., 2010; Jones, 2019).

Over the years, a third teaching method, commonly known as blended learning, has gained wide acceptance among teachers and researchers. Combining the strengths of various technologies, web-based tools and learning theories, this approach promises the best of both worlds (online and traditional face-to-face systems). Research shows that a combination of on-campus and online work is ideal and can be very effective compared to using either format alone (Jones, 2019). Blended learning can create additional opportunities as it allows them to participate in regular one-on-one learning (Alijani et al., 2014; Jones, 2019), while providing them with the flexibility needed to progress at their own pace.

1.6 Online Learning

The truth is that the term e-learning means different things to different people. When the phrase was first popularized in 2000, it most often referred to computer training on intranets and the Internet. "e-learning" has replaced "online education", which in the heyday of peak performance just wasn't sexy enough. There was a time when we put "e" before everything, "e" for letters, "e" for toys, "e" for shopping, "e" for banking, "e" for pets - "e"" the list goes on. on and on. But the site continued to refer to course delivery. (Alijani et al., 2014)

Online learning has become an integral part of higher education, which can be seen in the continued growth and growth of online course offerings and online academic and professional education programs. In most fields and majors, students can benefit from a wide range of online learning options, from individualized online courses to fully online bachelor's, certificate, and master's degree programs. However, it can be challenging to choose from the many options available to achieve your academic and career goals through an online program.

Online learning is the acquisition of skills and knowledge through electronic devices such as computers, mobile phones, laptops etc. using the Internet. With online training, teachers or mentors can more flexibly reach all students and teach them the skills they need more effectively. Students who are now unable to attend traditional regular classes can learn anything from anywhere with the help of the Internet.

The Covid-19 pandemic affects all sectors of life. Due to the lockdown, students could not access the traditional classroom, which negatively affects their studies. So the educational governments of the world have decided to start online classes for students so that their studies can continue. This creates a demand for online training methods and the importance of online training became evident during this period. Many colleges, schools and educational institutions offer online courses to students. Courses to help students improve their skills and gain knowledge from home online. Online education is becoming a great source of education for students. Thanks to the incredible invention of devices such as mobile phones or technology and the availability of the Internet, students have become more flexible to learn anything anywhere, anytime. That kind of learning flexibility cannot be achieved during traditional classroom teaching, because in face-to-face learning, students come in fours. Online training includes audio, text, video, animations, conversations with teachers or mentors and virtual training provided by teachers to students. They are ways of imparting skills and knowledge to students to become professionals in their fields. There are many Internet resources that teachers and students can use to connect. Some of them are

social media platforms, Google meet, Google classroom, telegram, WhatsApp, zoom etc. Using these sources, teachers can communicate with a large number of students at the same time. These resources make it easier for teachers to teach the huge number groups in one period. (Alijani et al., 2014)

1.7 Education & E-Learning

Dramatic changes in the way people live, play and enjoy themselves around the world have also changed the way people learn. The education sector has undergone major changes with changing demographics, changing industry expectations and new young people seeking the power of knowledge to transform their lives, disdaining distance. Classroom learning is effective, but no longer the only option. With the Internet playing the great equalizer of our time, opportunities such as distance learning and self-study are much more powerful than before. Today, universities and knowledge leaders are able to provide education to students in countless innovative ways. It's about using technology innovatively in a way that best suits those circumstances (Bilal. 2015: online)

1.8 Benefits of Online Learning

Organizations are increasingly adopting e-learning as a primary training method for training employees (Jones, 2019). At the same time, educational institutions are moving to spread the Internet both on campus and remotely. For organizations and institutions to take this often expensive step, there must be an understanding that the use of e-learning offers great benefits. Some of the benefits for students and teachers are outlined below.

For learners, online learning knows no time zones, and location and distance are not an issue. In asynchronous e-learning, students can access online materials at any time, while synchronous e-learning allows real-time communication between students and teachers. Students can use the Internet to find up-to-date and relevant study materials and interact with experts in their student fields. Situational learning, or the application of knowledge and skills in specific contexts, becomes easier because students can complete online courses while working or in their own space and can contextualize learning.

Tutors can be tutored anytime, anywhere. Online materials can be updated and students can see the changes immediately. When students have access to materials online, it is easier for teachers to direct them to information relevant to their needs. Properly designed e-learning systems can be used to determine the needs and knowledge levels of students and to find appropriate materials for students to choose to achieve the desired learning outcomes (Anderson, 2008: 17).

1.9 What is Blended Learning

Blended learning generally refers to "a combination of online and face-to-face learning" . The American Society for Training and Development (Graham, 2006, p. 1) described this as "one of the most important trends in the knowledge dissemination industry". Definitions of "blended learning" vary; However, Graham, Allen and Ure (2003) identified three common definitions. These include: a) "combining teaching methods (or delivery media)" b) "combining teaching methods" c) "combining online and face-to-face teaching" (Graham, 2006: 12) recommend that the first two definitions are very broad because they do not cover almost all learning systems and do not properly reflect the nature of blended learning. The latter definition seems more correct, because it reflects the periods of development of mixed learning systems. Distributed learning mostly refers to the difference in time and space between the teacher and the learner (Mason and Rennie, 2006). Analyzing the historical development of blended learning in Graham's (2006) study, it can be seen that face-to-face learning and distributed learning were completely separate from each other because they

had different tools and different learning needs. away While face-to-face learning is based on interpersonal interaction, distributed learning emphasizes "self-paced learning and the interaction of learning materials" (p. 5). Although "synchronous or high-quality" communication in distributed learning has been impossible due to the limitations of digital learning technologies, rapid innovations in technology over the past half century allow the combination of face-to-face learning elements with distributed learning elements. Graham, 2006, p. 5). It can be argued that the degree of integration of these typical learning methods will increase in the future as learning technologies evolve.

1.10 Why Blended Learning

Reed and Singh (2001) explain blended learning as "combining traditional classroom education with e-learning activities" and refer to their study Dimensions of Blended. They argue that the term "blended" included various aspects of learning strategy and blended learning can be related to more than one dimension, such as "blended offline and online learning, mixed self-paced and real-time learning, collaborative learning, mixed. structured and unstructured learning ", etc. Furthermore, they argue that blended learning has more benefits than a single type of learning can provide. Some notable ones (page 2): a) "Better learning performance": some studies done in Tennessee and Stanford University prove that a blended learning method improves learning results because it gives the student a better combination of the student's learning style and the selected learning. program b) Expand the reach: although the traditional teaching system face to face and imposes certain limitations on students' access to information due to a specific time and place, the computer classroom allows access to information for those who could not physically participate in the classroom at a certain time. c) Optimizing development costs and time': harmonizing different representations can strengthen a learning program and be more cost and time efficient. Different types of learners may find it possible to learn material in different formats with a blended delivery system, and blended learning also serves as a transition from passive to active learning (Hancock and Wong, 2012, cited in Kaur, 2013). One of the most important tasks of the teachers will be to diversify the teaching methods and prevent the students from the monotony of one type of system. Therefore, the importance of combining different delivery methods comes into play at this stage.

2. Methodology

2.1 Design of the Study

The researchers developed a semi-closed survey questionnaire based on a 1-0 point scale, ranging from 1= Yes and 0 = No. The items on the questionnaire were based on the attitudes of the students, parents, and educationalists towards blended learning. The questionnaire includes 5 sections: bio, Technological aspect, educational aspect, platforms and applications aspect, Training aspect and Suggestion. .The section includes information about whether the respondent is a parent, learner, or educationalist. The technological section simulates several technical and technological aspects and the sufficiency of technological equipment that they have at their home. The educational section presents some points about the teaching-learning process during the electronic learning period. The part concerned with the applications and platforms wonders about which platform or application is most appropriate for e-learning or blended learning in Iraq. The section concerned with training wonders about the competence of the teacher and the learner alike in several aspects, and do they need more training?

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A. Bio info:			
I am a:			

Learner		Parent		Educationalist	

No.	Criteria	yes	No
B. Technological aspect:			
1.	We have internet access in our house.		
2.	The internet service is good.		
3.	All the peoples in our family have smart devices.		
4.	All the family members use one smart device.		
5.	The smart devices are available for parents only.		
6.	All the family members have the knowledge necessary to use E-learning tools.		
7.	The parents are not interested in technology.		
C. Educational aspect: E-learning is:			
8.	Good alternative for traditional learning.		
9.	Useful in learning new topics.		
10.	Useful only in reviewing already explained topics.		
11.	Helping the learners to accomplish their tasks.		
12.	Enabling learners get immediate feedback.		
13.	Uploading and downloading materials is easy.		
14.	Not containing attention distracters.		
15.	Providing reliable tests.		
16.	Providing valid tests.		
17.	Providing realistic test scores.		
18.	Providing good learning outcomes.		
D. Platforms and applications aspect : this platform/ application is suitable for Iraqi learners:			
19.	Google classroom		
20.	Newton platform		
21.	Youtube		
22.	Viber		

23.	Telegram		
24.	Free conference calls		
25.	Others		
E. Training aspect			
26.	Parents need to be trained to use E-learning tools.		
27.	Learners should be trained to get the full use from E-learning tools.		
28.	The teachers are using their technological teaching tools perfectly.		
29.	Teachers need to be trained to used E-learning tools.		
30.	There is an institutional technical support team to help learners when facing technical problems.		

2.2 Validation:

The items of the questionnaire were formulated by the researchers, and their validity and reliability were verified by presenting them to a group of experts and specialists in the fields of teaching methods and linguistics, and their notes were taken and used to obtain higher validity and reliability.

2.3 Conducting the questionnaire

The questionnaire was distributed to the recipients for the first time electronically, using Google forms, due to the quarantine conditions, on ..... 2020. It was distributed to 125 students from the second stage of the English Language Department, and it was answered by them. Then the forms were distributed to the parents of the students, and their answers were obtained. The desired sample was 100 students, but the number of recipients was increased due to the possibility of losing some members of the sample due to failure, leaving the study, or for other reasons. Then the questionnaire was distributed to a group of 100 instructors in the College of Basic Education, and the answers were obtained as follows:

	A. Bio info:						
	I am a:						
	Learner		Parent		Educationalist		
	B. Technological aspect:	Learners		Parents		Instructors	
No.	Criteria	yes	No	yes	No	Yes	No
1.	We have internet access in our house.	88%	12%	85%	15%	100 %	0%
2.	The internet service is good.	41%	59%	52%	48%	45%	55%
3.	All the learners in our family have smart devices.	72%	28%	70%	30%	88%	12%
4.	All the family members use one smart device for learning purposes.	11%	89%	18%	82%	2%	98%

5.	All the family members have the necessary knowledge needed to use E-learning tools.	26%	74%	28%	72%	68%	32%
6.	The parents are not interested in technology.	77%	23%	84%	16%	42%	58%
	C. Educational aspect: E-learning is:						
7. 7.	Good alternative for traditional learning.	22%	78%	15%	85%	25%	75%
8. 8.	Useful in learning new topics.	20%	80%	19%	81%	20%	80%
9. 9.	Useful only in reviewing already explained topics.	70%	30%	54%	46%	88%	12%
10. 10.	Helping the learners to accomplish their tasks.	45%	55%	53%	47%	85%	15%
11. 11.	Enabling learners get immediate feedback.	77%	33%	80%	20%	81%	19%
12. 12.	Uploading and downloading materials is easy.	82%	28%	60%	40%	35%	65%
13. 13.	Not containing attention distracters.	62%	48%	65%	35%	74%	36%
14. 14.	Providing reliable tests.	83%	27%	60%	40%	5%	95%
15. 15.	Providing valid tests.	76%	34%	54%	46%	10%	90%
16. 16.	Providing realistic test scores.	61%	39%	71%	29%	6%	94%
17. 17.	Providing good learning outcomes.	54%	46%	50%	50%	30%	70%
	D. Platforms and applications aspect : this platform/ application is suitable for Iraqi learners:						
18. 18.	Google classroom	89%		70%		90%	
19. 19.	Moodle	30%		24%		45%	
20. 20.	Youtube	65%		62%		70%	
21. 21.	Viber	37%		40%		60%	
22. 22.	Telegram	50%		40%		76%	
23. 23.	Free conference calls	20%		23%		60%	
24. 24.	Others	30%		40%		54%	
	E. Training aspect						
25. 25.	Parents need to be trained to use E-learning tools.	82%	18%	75%	25%	85%	15%
26. 26.	Learners should be trained to get the full use from E-learning tools.	73%	27%	82%	18%	84%	16%
27. 27.	The teachers are using their technological teaching tools perfectly.	36%	64%	22%	88%	92%	8%
28. 28.	Teachers need to be trained to use E-learning tools.	67%	33%	24%	84%	35%	65%
29. 29.	There is an institutional technical support team to help learners when facing technical problems.	95%	5%	88%	12%	97%	3%

In the next academic year in ....2021 the same questionnaire was distributed to the same sample . The answers of the respondent come as follow:

	A: Bio info:						
	I am a:						
	Lea rner		Par ent		Educationa list		
	B. Technological aspect:	Lear ners		pare nts		Instruc tors	
No.	Criteria	yes	No	yes	No	Yes	No
1.	We have internet access in our house.	95%	5%	92%	8%	100 %	0%
2.	The internet service is good.	56%	44%	58%	42%	59%	41%
3.	All the learners in our family have smart devices.	88%	12%	79%	21%	96%	4%
4.	All the family members use one smart device for learning purposes.	2%	98%	5%	95%	0%	100%
5.	All the family members have the necessary knowledge needed to use E-learning tools.	73%	37%	65%	45%	80%	20%
6.	The parents are not interested in technology.	76%	24%	68%	32%	86%	14%
	C. Educational aspect: E-learning is:						
7. .	Good alternative for traditional learning.	56%	44%	60%	40%	80%	20%
8. .	Useful in learning new topics.	60%	40%	45%	54%	90%	10%
9. .	Useful only in reviewing already explained topics.	82%	18%	64%	36%	88%	12%
10. 0.	Helping the learners to accomplish their tasks.	66%	34%	53%	47%	75%	25%
11. 1.	Enabling learners get immediate feedback.	71%	29%	75%	25%	88%	12%
12. 2.	Uploading and downloading materials is easy.	78%	22%	88%	12%	90%	10%
13. 3.	Not containing attention distracters.	79%	21%	75%	25%	97%	3%
14. 4.	Providing reliable tests.	80%	20%	60%	40%	90%	10%
15. 5.	Providing valid tests.	85%	15%	88%	12%	90%	10%
16. 6.	Providing realistic test scores.	77%	23%	66%	34%	88%	12%
17. 7.	Providing good learning outcomes.	78%	22%	77%	23%	78%	22%
	D. Platforms and applications aspect : this platform/ application is suitable for Iraqi learners:						
18. 8.	Google classroom	88%		78%		100%	
19. 9.	Moodle	26%		25%		56%	

20. 0.	Youtube	78%		70%		80%	
21. 1.	Viber	20%		20%		40%	
22. 2.	Telegram	77%		43%		56%	
23. 3.	Free conference calls	34%		15%		87%	
24. 4.	Others	18%		16%		40%	
	E. Training aspect						
25. 5.	Parents need to be trained to use E-learning tools.	82%	18%	75%	25%	95%	5%
26. 6.	Learners should be trained to get the full use from E-learning tools.	83%	17%	82%	18%	94%	6%
27. 7.	The teachers are using their technological teaching tools perfectly.	84%	16%	88%	22%	90%	10%
28. 8.	Teachers need to be trained to use E-learning tools.	77%	23%	76%	24%	91%	9%
29. 9.	There is an institutional technical support team to help learners when facing technical problems.	85%	15%	88%	12%	97%	3%

2.4 Results

The analysis is presented for the each section in the questionnaire for the tow conductions of tool:

1-Technological aspect: in 2020, the questionnaire showed a weakness in the technical aspect in the three groups of respondents, as the items showed a weakness in the Internet service and the lack of some families to the Internet service in addition to the fact that many learners do not have their own smart devices and the insufficient skills of the learners in using smart devices effectively in a way that supports learning.

In 2021,The questionnaire showed a remarkable development in the technical aspect for the three groups of respondents, as the items showed a slight improvement in the Internet service and the availability of Internet service in many families, in addition to the fact that most learners have their own smart devices, and the learners' skills in using smart devices improved in a way that supports learning

2- Educational aspect:

As for the educational process, the items of the questionnaire, which was conducted in 2020, showed that e-learning is not a good alternative to actual education, as it is not appropriate to explain completely new topics to the student, and the results of its tests are unrealistic and do not reflect the actual level of the student. Once again this was the opinion of the three groups of respondents: learners, parents and instructors.

In 2021 the questionnaire revealed different results to the favor of E-learning In most of the items for the three groups, but the instructors still have the same opinion about online test and its validity and reliability. During the time of conducting the questionnaire the type of the education in Iraqi university was blended learning so the students had to types of tests: actual and virtual and it can be said that blended learning solved the problematic issue of online tests.

3- Platforms and applications aspect

The items of the questionnaire distributed in 2020 showed a divergence in the opinions of the recipients regarding the platforms and applications used in e-learning. The learners preferred to use the YouTube and Telegram applications, while the teachers preferred to use different applications such as Google Classroom and Free Conference Calls. As for the parents, they preferred the YouTube application in a percentage of 45%.

In the second distribution of the questionnaire, the result differed significantly, as the three groups of recipients agreed to use the Google Classroom platform, with a large percentage.

4-Training aspect

With regard to training and technical support, the questionnaire distributed in 2020 showed, according to the students' and parents' opinions, that everyone needs more training to master the requirements of e-learning, in addition to the lack of technical support units to help students with the technical difficulties that they may face. As for the teachers, they say that the teachers are proficient in the e-learning tools, and that the parents and the learners are the ones who need training to master the use of the e-learning tools, and they talk with them in the absence of technical support units.

After a year has passed and the questionnaire was distributed in 2021, its items showed a difference in the results, as students see that they and their teachers have relatively mastered the use of e-learning tools. Parents see that everyone still needs training. The teachers see that the students also need more training despite the change in the percentage from the percentage of the first questionnaire. And everyone agreed again on the absence of technical support units.

Conclusion

E-learning's effects on education are posing instructors, parents, and students who take online courses with it new difficulties that must be quickly overcome. The process of teaching and learning in an e-learning environment differs from that of a traditional classroom and can be more difficult for both teachers and students. To ensure instructor and student success in this novel learning environment, it is essential in e-learning to recognize the challenges and take best practice solutions into consideration. It is crucial to define what the term "e-learning" means in order to comprehend the difficulties posed by an e-learning environment. E-learning is defined by Clark and Mayer (2011) as instruction delivered through any technological mode intended to foster learning. In contrast to the traditional classroom, teaching and learning take place differently in an e-learning environment, which can pose new difficulties for both the instructors and the students using this online learning platform. With the advent of technology-assisted learning tools, the traditional classroom-only learning environment is being replaced by either an all-online or blended learning environment, drastically altering the face of education. To ensure student success, it is important to take into account the difficulties that instructors and learners may encounter in an online learning environment.

Everything as a first experience is difficult, therefore in the first questionnaire, the results were not in favor of the electronic, and after a year of experience obtained by all the respondents of the questionnaire, the results changed and became mostly in favor of the electronic and integrated (remotely and in person), which can be adopted within educational institutions After avoiding weaknesses.

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